

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Original) A method for confirming communication of data to a
2 first device belonging to a first user from a second device belonging to a second
3 user, the method comprising:
4 receiving a message containing data from the second device at the first
5 device;
6 translating the data into a string of words that can be recognized by a
7 human;
8 allowing the second device to translate the data into a corresponding string
9 of words;
10 displaying the string of words to the first user; and
11 allowing the first user and the second user to confirm a match between the
12 string of words from the first device and the corresponding string of words from
13 the second device, wherein the confirmation process is performed through a
14 separate communication channel, and wherein the confirmation ensures that the
15 data sent by the second device is successfully received by the first device, is
16 authentic, and is integrity-checked.

- 1 2. (Original) The method of claim 1, wherein prior to receiving the
2 message, the first device broadcasts a request asking for the second device's data,
3 and wherein the data can be an identifier.

1 3. (Original) The method of claim 1,
2 wherein the message received by the first device is signed with a private
3 key corresponding to a public key associated with the second device; and
4 wherein the method further comprises using the public key associated with
5 the second device to verify that the message is signed with the private key
6 associated with the second device.

1 4. (Original) The method of claim 1,
2 wherein while receiving the message, the first device receives more than
3 one message; and
4 wherein the method further comprises translating the data in the other
5 messages into strings of words which can be recognized by a human, and
6 displaying these strings of words to the first user, thereby allowing the first user to
7 match one of these strings of words with the corresponding string derived by the
8 second device from the original data.

1 5. (Original) The method of claim 1, wherein prior to the reception of
2 the message at the first device, the first user obtains a portion of the hash of the
3 data on a separate communication channel and enters this portion into the first
4 device, and wherein the first device uses this portion to filter subsequently
5 received messages.

1 6. (Original) The method of claim 1, wherein the data received at the
2 first device contains a cryptographically generated address (CGA) belonging to
3 the second device, which is generated by:
4 performing a hash function on the second device's public key; and
5 constructing the CGA by combining a number of bits of an address
6 belonging to the second device and a number of bits from the result of the hash
7 function.

1 7. (Currently amended) The method of claim 6,
2 wherein the message received by the first device includes a public key
3 | associated with the ~~sending-second~~ device; and
4 wherein the method further comprises performing a hash function on the
5 | public key to verify the association between the ~~received-CGA~~ and the public key
6 | associated with the ~~sending-second~~ device.

1 8. (Original) The method of claim 1, wherein the translation uses a
2 one-time password (OTP) dictionary.

1 9. (Currently amended) The method of claim 2,
2 | wherein the request includes a Crypto-Based Identifier (CBID) belonging
3 | to the first device; and
4 wherein the request is signed with a private key associated with the first
5 device, thereby allowing the request to be verifiably associated with the first
6 device.

1 10. (Original) A computer-readable storage medium storing
2 instructions that when executed by a computer cause the computer to perform a
3 method for confirming communication of data to a first device belonging to a first
4 user from a second device belonging to a second user, the method comprising:
5 receiving a message containing data from the second device at the first
6 device;
7 translating the data into a string of words that can be recognized by a
8 human;
9 allowing the second device to translate the data into a corresponding string
10 of words;
11 displaying the string of words to the first user; and

12 allowing the first user and the second user to confirm a match between the
13 string of words from the first device and the corresponding string of words from
14 the second device, wherein the confirmation process is performed through a
15 separate communication channel, and wherein the confirmation ensures that the
16 data sent by the second device is successfully received by the first device, is
17 authentic, and is integrity-checked.

1 11. (Original) The computer-readable storage medium of claim 10,
2 wherein prior to receiving the message, wherein prior to receiving the message,
3 the first device broadcasts a request asking for the second device's data, and
4 wherein the data can be an identifier.

1 12. (Original) The computer-readable storage medium of claim 10,
2 wherein the message received by the first device is signed with a private
3 key corresponding to a public key associated with the second device; and
4 wherein the method further comprises using the public key associated with
5 the second device to verify that the message is signed with the private key
6 associated with the second device.

1 13. (Original) The computer-readable storage medium of claim 10,
2 wherein while receiving the message, the first device receives more than
3 one message; and
4 wherein the method further comprises translating the data in the other
5 messages into strings of words which can be recognized by a human, and
6 displaying these strings of words to the first user, thereby allowing the first user to
7 match one of these strings of words with the corresponding string derived by the
8 second device from the original data.

1 14. (Original) The computer-readable storage medium of claim 10,
2 wherein prior to the reception of the message at the first device, the first user
3 obtains a portion of the hash of the data on a separate communication channel and
4 enters this portion into the first device, and wherein the first device uses this
5 portion to filter subsequently received messages.

1 15. (Original) The computer-readable storage medium of claim 10,
2 wherein the data received at the first device contains a cryptographically generated
3 address (CGA) belonging to the second device, which is generated by:
4 performing a hash function on the second device's public key; and
5 constructing the CGA by combining a number of bits of an address
6 belonging to the second device and a number of bits from the result of the hash
7 function.

1 16. (Currently amended) The computer-readable storage medium of
2 claim 15,
3 wherein the message received by the first device includes a public key
4 associated with the ~~sending~~second device; and
5 wherein the method further comprises performing a hash function on the
6 public key to verify the association between the ~~received~~-CGA and the public key
7 associated with the ~~sending~~second device.

1 17. (Original) The computer-readable storage medium of claim 10,
2 wherein the translation uses a one-time password (OTP) dictionary.

1 18. (Currently amended) The method of claim 11,
2 wherein the request includes a Crypto-Based Identifier (CBID) belonging
3 to the first device; and

4 wherein the request is signed with a private key associated with the first
5 device, thereby allowing the request to be verifiably associated with the first
6 device.

1 19. (Original) An apparatus that confirms communication of data
2 between a first user and a second user, comprising:
3 a receiving mechanism in a first device belonging to the first user, the
4 receiving mechanism configured to receive a message containing data from a
5 second device belonging to the second user;
6 a translation mechanism in the first device configured to translate the data
7 into a string of words that can be recognized by a human;
8 a display mechanism configured to display the string of words to the first
9 user; and
10 a confirmation mechanism that allows the first user and the second user to
11 confirm a match between the string of words from the first device and a
12 corresponding string of words translated from the data at the second device,
13 wherein the confirmation process is performed through a separate communication
14 channel, and wherein the confirmation ensures that the data sent by the second
15 device is successfully received by the first device, is authentic, and is integrity-
16 checked.

1 20. (Original) The apparatus of claim 19, wherein prior to receiving the
2 message, the first device is configured to broadcast a request asking for the second
3 device's data, and wherein the data can be an identifier.

1 21. (Original) The apparatus of claim 19,
2 wherein the message received by the first device is signed with a private
3 key corresponding to a public key associated with the second device; and

4 wherein the apparatus further comprises a verification mechanism
5 configured to use the public key associated with the second device to verify that
6 the message is signed with the private key associated with the second device.

1 22. (Original) The apparatus of claim 19,
2 wherein the first device is configured to receive more than one message
3 while receiving the message;
4 wherein the translation mechanism is further configured to translate the
5 data in the other messages into strings of words which can be recognized by a
6 human; and
7 wherein the display mechanism is further configured to display these
8 strings of words to the first user, thereby allowing the first user to match these
9 string of words with the corresponding string derived by the second device from
10 the original data.

1 23. (Original) The apparatus of claim 19, wherein prior to the
2 reception of the message at the first device, the first device is configured to enable
3 the first user to obtain a portion of the hash of the data on a separate
4 communication channel and to enter this portion into the first device, and wherein
5 the first device is configured to use this portion to filter subsequently received
6 messages.

1 24. (Original) The apparatus of claim 19, wherein the data received at
2 the first device contains a cryptographically generated address (CGA) belonging
3 to the second device, which is generated by:
4 performing a hash function on the second device's public key; and
5 constructing the CGA by combining a number of bits of an address
6 belonging to the second device and a number of bits from the result of the hash
7 function.

1 25. (Currently amended) The apparatus of claim 24,
2 wherein the message received by the first device includes a public key
3 | associated with the ~~sending~~second device; and
4 wherein the apparatus further comprises a verification mechanism
5 configured to perform a hash function on the public key to verify the association
6 | between the ~~received~~ CGA and the public key associated with the ~~sending~~second
7 device.

1 26. (Original) The apparatus of claim 19, wherein the translation
2 mechanism uses a one-time password (OTP) dictionary.

1 27. (Currently amended) The apparatus of claim 20,
2 | wherein the request includes a Crypto-Based Identifier (CBID) belonging
3 | to the first device; and
4 wherein the request is signed with a private key associated with the first
5 device, thereby allowing the request to be verifiably associated with the first
6 device.